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Progress Report of Forest Admn. In Coorg.

~~1898-99~~
1892-93

Sub-Forest Admn. Reports Coorg

Bengalore

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1892-1893

BENGAL SECRETARIAT

No. 634-F., dated Simla, the 15th June 1894.

From—SIR E. C. BUCK, KT., C S I., Secretary to the Government of India, Department of Revenue and Agriculture,

To—The Chief Commissioner of Coorg.

I AM directed to acknowledge the receipt of your letter No. 2064, dated the 18th December last, forwarding, for the orders of the Government of India, the Annual Report of Forest Administration in Coorg for the period of 15 months ending 30th June 1893 In consequence of the death, towards the close of this period, of the late Deputy Conservator, Mr. Foster, in whom the Province, as you observe, has lost an able and meritorious officer, the present report is confined for the most part to a bare statement of facts, and a more exhaustive review of the position of forest administration in Coorg may suitably be deferred until the report for the current year has been received. I am, however, to communicate the following observations on some of the matters alluded to in the report now under consideration.

2. The extent of the forests managed by the Department remained practically unchanged. It is noticed that the considerable area of 86,000 acres continued to be under settlement, but will be declared reserved forest during the current year. In connection with the survey of these forests, it does not appear from the report or your orders what further action has been taken on the suggestion, made in this Department letter marginally quoted, for the institution of a detailed interior survey; and I am to ask that information on this question may be furnished in due course. There has been some delay in the preparation of working-plans, but it has been noticed with satisfaction that the existing working-plans and plans-of-operation have been adhered to. Under the head of forest protection, the report should have commented on the results of the prosecutions undertaken for forest offences, which exhibit a considerable decline in the percentage (56) of convictions obtained, and a large increase in the number of cases compounded. As regards the important subject of fire-protection, the results were satisfactory when compared with those of previous years; but, as is apparent from the report for 1891-92 and that under notice, they are much less so than those obtained elsewhere under more unfavourable conditions. The Commissioner doubts whether fires are wilfully lighted by the Coorgs, so that failure in fire-protection may be mainly attributed to the preventible causes suggested by Mr. Hill in his report on these tracts, *viz.* carelessness on the part of the forest staff and insufficiency of interior fire-lines. The Government of India, I am to say, regret to find that this subject had not met at the hands of the officers who preceded Mr. Foster with the attention it deserved, and therefore note with satisfaction the remedial efforts which have taken place during the year. Any measures taken or proposed with the view to improve the conditions under which protection is attempted should be fully explained in the report for the current year. It has been observed that special attention has been given to the question of forest grazing. The report could, under the circumstances already noticed, hardly be expected to deal fully with this important subject, but it contains some indications in the table in paragraph 43 that certain areas have been over-grazed. Until grazing has been regulated and closure has been provided for, natural reproduction, which can never be entirely replaced by artificial cultivation, must

No. 1139 F, dated 16th October 1891.

inevitably decline. Nevertheless, the remarks in paragraph 52 of the report on the results obtained from *kumri* plantings, that is plantings made immediately after the harvesting of a food-crop where shifting cultivation (*kumri*) is practised, afford grounds for the belief that, as in Burma, valuable sylvicultural results may, in this manner, be secured.

3. Bearing in mind that the period under report extended over fifteen, instead of, as usual, twelve months, the quantity of produce removed under all heads was considerably less than during 1891-92, the falling-off being ascribed in part to the presence of cholera. The anticipated decline in the outturn of sandalwood is a matter deserving of careful investigation, and the Government of India are advised that the exploitation of this valuable product should be placed, as soon as possible, on a securer basis by the preparation of a working scheme which will extend over a term of years, and under which it will be eventually possible not only to maintain, but to improve and increase, the supply though a considerable reduction may in the first instance prove unavoidable. The plan should embrace the question of extending the area of the sandalwood forests by planting, expenditure in which direction has been authoritatively reported to be a highly profitable investment. I am to request that instructions to this effect may be given to the Deputy Conservator, who will, as provided in Circular No. 9-F., dated 14th May 1889, obtain, if necessary, the advice of the Inspector General of Forests.

4. The financial results obtained were as follows :—

Year.		Receipts.	Charges.	Surplus.	Proportion of Surplus to gross Receipts
		Rs.	Rs.	Rs.	Per cent.
Forest year (1st July 1892 to 30th June 1893).	1892-93 ...	1,85,529	70,407	1,15,122	62
Financial year	1892-93 ...	1,80,676	73,091	1,07,585	59
	1891-92 ...	1,82,897	86,860	96,037	53
	Difference in 1892-93 ..	— 2,221	— 13,769	+ 11,548	+ 6
	Average for the 5 years ending 1891-92.	1,34,884	75,580	59,304	44

Although the receipts, as compared with those of previous year, slightly declined, the surplus, owing to diminished expenditure under various sub-heads, showed a material increase. It is observed that the revenue from sandalwood and cardamoms is expected to fall; but an enhancement of forest income from other sources may be reasonably anticipated as soon as the ghât forests have been opened out, and improvements in organization, such as the development of export roads, of which the necessity is indicated by the Deputy Conservator, have been introduced. The opinion expressed by the Deputy Conservator that the financial outlook is most gloomy is therefore probably unjustifiable under present circumstances.

Appendix showing the discrepancies noticed in the Coorg Forest Administration Report for 1892-93.

Paragraph 34 of report.

The percentage of convictions in 1892-93 is 56, and not 53·84 as stated, of the total number of cases decided by the Courts.

PARAGRAPH 64 OF REPORT.

The number of bamboos shown as removed by purchasers in 1891-92 is 4,65,367, whereas in the report itself for that year the number given is 4,75,587.

Paragraph 6 of Chief Commissioner's resolution.

Paragraph 51 of the report for 1891-92 shows a total of 110 acres of sandalwood planted, and not 100 acres as here stated.

G. C. Press, Simla.—No. 53 R. & A. D.—10-6-94.—190.

Proceedings of the Chief Commissioner of Coorg, (Forests),—No. 2053—133-93, dated Bangalore, the 15th December 1893.

READ—

Letter No. 455—245, dated 7th October 1893, from the Commissioner of Coorg, submitting, with remarks, the Annual Forest Report for the year 1892—93.

ORDER THEREON—No. 2053—133-93, DATED BANGALORE, THE 15TH DEC. 1893.

Alteration of Area.—Four hundred and forty one acres were added during the year to the area of Reserved Forests, while that of the Protected Forests was reduced by 1,179 acres. The total area at the close of the year was 73,205 acres of Reserved and 4,98,641 of Protected Forests.

2. *Surveys.*—The re-surveys of the ghat line, the detailed survey of the jama and leased cardamom malles and plantations, were entirely completed and the surveys of the ghat forests nearly brought to a close.

3. *Demarcation.*—Three hundred and thirty seven miles of old boundary lines were cleared and widened and 71 miles of new lines cut.

4. *Working Plans.*—The attention of the Deputy Conservator of Forests is invited to paragraph 3 of the Government of India's *No. 1288 F., dated Simla, the 21st December 1889, in which the preparation of the working plans was ordered to be expedited and the submission of the plans referred to in paragraph 17 of the report will be awaited.

* Printed in the Forest Report for 1888—89.

5. *Fire protection.*—There were 26 prosecutions for breach of Forest Law, 14 of which resulted in convictions. During the year under review there were 42 fires in which 9,586 acres were burnt. Compared with the number of acres burnt during the past 3 years, the area in the present year has decreased very considerably, though the number of fires has risen by 8 (42 against 34.) The late Mr. Foster took great interest in the prevention of fires and his efforts have, so far, resulted in success. The Chief Commissioner notices that fire protection has the attention of the present Deputy Conservator of Forests and it is trusted that further progress will be made in this direction during the next year.

6. *Natural Reproduction.*—This has not been satisfactory during the year under review and the Deputy Conservator reports that this work continues to be most discouraging. This is no doubt due mainly to recognised grazing rights. The Chief Commissioner will be glad to consider any remedial measures which Mr. Prevost, after a longer experience in the District, may be able to suggest in consultation with the Commissioner.

One hundred and fifty four acres of sandal against 100, and 133 of teak against 60, last year, were added by means of artificial reproduction.

7. *Yield of Forest Produce.*—Although there was a decrease in the yield of timber and bamboos during the year, as compared with the year previous, the average sale rates obtained during the year have been higher than those of the previous years.

8. *Financial Results.*—The revenue and expenditure for the 15 months comprising the year under review was respectively Rs. 1,97,966 and 91,057. The receipts and expenditure are both less this year, resulting in a net surplus of Rs. 11,548 more than last year, which is satisfactory.

9. The suggestion made by the Deputy Conservator of Forests in paragraph 84 of the report regarding the erection of stone cairns and posts might be tried in convenient localities and the result reported.

10. The presence of the borer insect in sandalwood and young teak plantations requires very careful attention and the Chief Commissioner will await the result of the Deputy Conservator's investigation into the subject.

Proceedings of the Chief Commissioner of Coorg,
(Forests),—No. 2053—133-93, dated Bangalore, the 15th December 1893.

11. The Deputy Conservator's reference to the forest subordinates in paragraph 90 of the report shows that more intimate attention is required in dealing with his staff. It is hoped that the practical method he proposes to adopt will improve both the behaviour and efficiency of the men.

12. In the review on last year's report, the Chief Commissioner had occasion to commend the satisfactory result of the late Mr. Foster's work, by his death the Administration has lost an able officer.

CHAS: W. RAVENSHAW, MAJOR,

Secretary to the Chief Commissioner of Coorg.

To—The Commissioner of Coorg
" Deputy Conservator of Forests, Coorg.

No. 455—245, dated Merkara, the 7th October 1893.

From—G. F. Meiklejohn, Esq., Commissioner of Coorg.

To—The Secretary to the Chief Commissioner of Coorg, Bangalore.

I have the honor to forward the Progress Report of the Forest Administration in Coorg for 1892—93.

2. The financial results are even better than those of last year, the surplus being Rs. 1,07,585 against a surplus of Rs. 96,036-13-9 for the year 1891—92.

3. Sir E. Buck in his review of the last year's Administration Report on Coorg Forests remarks that 'the questions of most interest bearing on the conservation and improvement of the Forests relate to fires and grazing.'

4. During the year Mr. Foster took great interest in the prevention of fires, widening the fire lines energetically all round the forests to a width hitherto unknown in Coorg. He was successful so far that the area burned has again decreased, the figures for the last 3 years showing the area to be as follows:—

1890	...	...	...	... 28,484 acres.
1891	...	...	...	... 16,274 „
1892	...	...	...	... 9,586 „

There were, however, 8 more fires, 42 against 34, than in the previous year.

5. Of these there are 6 fires put down as caused by "wilful" incendiarism. I wrote at once to the Deputy Conservator on receiving this administration report, no single case of wilful incendiarism having been during the year reported to me, for particulars as regards these 6 fires, as the remarks made by the Government of India last year that 'where the people generally are in fault some really deterrent punishment such as the temporary withdrawal of all forest rights and privileges in the locality concerned should be applied,' showed what a serious view was taken of these alleged wilful fires.

I received the following reply. "Beyond Ranger's reports as to "Incendiary" fires I (Mr. Prevost) can find no correspondence in the office. We will have everything very different next year."

6. As a matter of fact, I have no reason to believe that in any one case either this year or last were the fires set alight wilfully by the villagers. Last year *one* was certainly ascribed to the malice of a Coorg who had been prosecuted for mischief but it was merely guessed that such might be the case. I have asked Mr. Prevost to let me know in future immediately on the occurrence of any fire supposed to be incendiary, so that I may at once have enquiries made, as to whether the villagers are really to blame. Mr. Foster was sick in April, or I have no doubt, thorough enquiries would have been made into each of the now-alleged-to-be incendiary fires—at all events he would have brought them to my notice had there been any cause to suspect the neighbouring villagers. I think myself that it is a matter of congratulation, considering how the Forest Department by taking up and really conserving the large tracts hitherto practically open to every one, are curtailing the former grazing grounds of the people and are also depriving them of what a Coorg so dearly loves 'Shikar,' that there should be so little ill-feeling against the department as there is—and I certainly would deprecate the employment of foreigners, as suggested by the Government of India, to any large extent, as likely to render the department unnecessarily unpopular.

7. As regards grazing, it is again remarked in the report that 'natural reproduction continues to be most discouraging owing to over grazing in those forests burdened with grazing rights and to the yearly damage done by fires.' Mr. Prevost is, of course, writing on the reports of others, as he has only been in the province very few weeks and I trust he will, when he becomes more thoroughly acquainted with the forests, be able to modify his remarks. The Government of India has however called special attention to the subject of grazing, and I

shall assist Mr. Prevost in any way I can in the matter when he makes his suggestions, but in a purely agricultural country like Coorg—where for the chief products—coffee and rice, cattle manure is found to be the best fertilizer, giving in the former case a strength to the trees, which no other manure seems able to do, any harsh measure, tending to make the struggle of either the planter or the ryot to keep cattle harder than it is at present, would be a fatal mistake.

8. The cost of collecting sandalwood was satisfactorily reduced from Rs. 35—2—0 to Rs. 30—5—2 a ton.

9. With the concluding remarks of Mr. Prevost I generally concur, especially with the one in which he hopes that "better results may be obtained by more frequent contact with the men." The way Mr. Prevost has already set about studying the language and speaking to his subordinates in canarese is admirable—an officer in touch with his subordinates and *sympathetic* with the people must succeed.

10. The Deputy Conservator's remarks as to the advisability of reducing the amount to be collected each year deserve attention, but as only dead wood has been collected it is clear that there has not been any over collection in the past two years; the wood brought in, had it not been collected, would have only deteriorated or disappeared altogether. It is impossible to lay down any hard or fast rule as to the number of tons to be collected annually. In one or two years a lot of trees may wither and die and in the next two or three very few,—but those which have withered should not be left uncollected because the Forest Department has fixed on a certain number of tons to be collected during any one year—any more than that green trees should be cut down because in some particular year there is found to be an insufficient quantity of dried wood to work up the number of tons fixed.

11. As regards the 'borer' in sandalwood, my attention was drawn to it after Mr. Foster's death and before Mr. Prevost arrived, and I personally visited most of the plantations, inspected and issued orders to have all infected trees taken up and burned as I consider the spread of the pest would be fatal to the plantations. On Mr. Prevost's arrival I drew his attention to the importance of the matter, taking him to the Fraserpet plantation to show what was happening.

12. As regards cardamoms the subject has been thoroughly threshed out in other correspondence. The collections noted in paragraph 67 of the report, which are made by the revenue authorities, show that there was no undue leniency shown in getting in the outstandings, but the forcible measures which had to be taken convinced me that the rents fixed were higher than could be fairly demanded from the malle holders, or be paid by them, without ruining them, as long as the price of cardamom remained at its present level, and with the full concurrence of Mr. Foster, some holders have been allowed to resign their leases, while others have been allowed to continue to hold their malles on much reduced terms.

13. I cannot close this letter without expressing my deep regret at the death of the late Mr. Foster in whom the province lost a most able officer.

PROGRESS REPORT

OF THE

FOREST ADMINISTRATION IN COORG,

FOR

1892—93.

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INTRODUCTION.

The Coorg Forest Division was under the charge of Mr. G. H. Foster from April 1892 up to the 8th of April 1893, from that date to the close of the year, owing to the death of the lamented Mr. Foster, the Division was under the charge of Mr. F. A. Seager, Extra Assistant Conservator, who joined the division on the 25th August 1892.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

ALTERATION OF AREA.

1. The area of reserved forests was increased by 441 acres, making the total area at the close of the year 73,205 acres as shown in Form No. 46; the alterations are as follows:—

		Acres.
Area at commencement of year		72,764
Added to jaiukál reserve from Bikkihare Urudwe	294	
Added to Nidta reserve from Kebbehola Paisari ..	50	
Added to Merkara firewood plantation. ..	97	
	——	441
Area at close of year		73,205

2. The 85,847 acres temporarily classed as Protected Forests in last year's report remain the same, the procedure as laid down in Chapter II of the Forest Act not being completed, steps are being taken to have them declared "Reserved" Forests, and next year's report will show them as such.

3. The survey of the ghat forests was completed during the year, and the correct area is 2,19,469 acres.

4. The area of the Protected Forests was reduced by 1,179 acres as follows:—

By trasfers to reserves	441	
Waste land sales, encroachments, building sites ..	738	
	——	1,179

5. The area of these forests at the close of the year is therefore as follows:—

	Acres.
Ghat Forests	2,19,469
Paisaries, Urudwes, Devarakadus	1,93,325
Forests tempararily classed as Protected Forests	85,847
	4,98,641

FOREST SETTLEMENT.

6. A claim to a right of way through the Merkara firewood plantation, 1st bit, pending from last year was disposed of without any extra expenditure by the 2nd Assistant Commissioner.

Demarcation.

7. Three hundred and thirty seven miles of old boundary lines were cleared and widened at a cost of Rs. 550 or Rs. 1—10—1 per mile, and 71 miles of new lines were cut at a cost of Rs. 1,176 or Rs. 16—9—0 per mile, the details of the work done is given below :—

Forest.	Miles of old lines cleared &c.	Cost.	Miles of new lines cut.	Cost.	Total cost.
Kattopura	5	12	...	...	12
Mensabetta	4	44	...	...	44
Alur	3	30	...	...	30
Malambi	35	222	...	...	222
Nidta	23	110	...	...	110
Yedavafiad and Gadinad	41	...	5	77	77
Attoor including Bendabetta	18	17	...	...	17
Jainkal	8½	5	...	...	5
Dubare	12	22	...	...	22
Devamachi and Mawkal	52	...	14½	262	262
Urti, Kerti, Keepalli and Arkomale	...	...	12½	79	79
Anekadu including Bactonkotte	24	4	...	...	4
Arkeri	27	...	14	166	166
Hutgat	24	...	12	452	452
Nalkeri	35	...	13	140	140
Ghat Forest	25½	84	...	...	84
Total.....	337	550	71	1,176	1,726

8. The old boundary marks were maintained and repaired, but no new work was undertaken.

9. The 25½ miles of ghat forest shown in last year's report as demarcated, but requiring widening, were completed during the year.

Surveys.

10. The figures given refer to the 12 months of the year ending 30th September 1892.

11. During the year under report the resurvey of the ghat line, the detailed survey of the jama, and leased cardamom malles, and plantations, were entirely completed. The survey of the area of the ghat forests was also nearly completed.

12. The out-turn of work is as follows :—

	Acres.	Equivalent in sqare miles.
Ghat Forests surveyed	1,20,442	188·19
Cardamom malles surveyed and included in the above	1,09,786.	171·54
Plantations surveyed	571	·89
Total...	2,30,799	360 62

Besides this a good deal of mapping was done.

13. The cost of the above as shown in the Deputy Superintendent's accounts was Rs. 9,005-1-2, whereas the accounts of this office show under head A VIII (c) Rs. 9,109—8—6, the difference of Rs. 104—7—4 being due to expenditure incurred on cooly wages employed by the forest staff to assist the survey department.

14. The average expenditure for the work of the year is Rs. 24—0—3 per square mile.

15. Full details of the work done will be found in the Deputy Superintendent's report which I have inserted as Appendix A.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

Regulation of Working.

Working plans and their control.

16. The working plan of the North Dubare Forest was adhered to as mentioned in paragraph 24 of last year's report. Mr. Foster stopped, to a considerable extent, the fellings in the Nalkeri Middle Circle.

The trees felled under the two above mentioned plans are shown in paragraph 55.

17. No fresh working plans have been submitted during the year, the Extra Assistant Conservator was engaged in collecting data for a plan for the Anekadu and Attoor forests which will shortly be submitted. Plans for the Devamachi and Mawkal forests, drawn up on the lines sketched by Mr. Hill in his Coorg inspection report, will be taken in hand next hot weather and resubmitted, I trust, before the close of the current year.

18. The cost of the preparation of the Anekadu and Attoor plan as detailed in subjoined statement was Rs. 843—6—0, this includes the pay and travelling allowance of the Extra Assistant Conservator and subordinate staff :—

Forest.	Area in square miles.	Cost per square mile.
Anekadu, Attoor, including Bendabetta and Bactancotte ..	20	42 2 8

19. The survey and marking out of the compartments of the Hutgat, Nalkeri and Dubare forests as laid down in the working plans have not as yet been attempted as the Forest Survey Establishment was fully engaged on the Ghat Forests. Work will however be commenced during the next working season.

I. (b). Annual Plans of Operations.

20. An annual plan of operations was prepared and as usual submitted to the Chief Commissioner for information. With but slight exceptions the plan was well worked up to.

II. (a). Communication and Buildings.

Roads and Bridges.

21. During the year no new roads were made, but existing ones were repaired, and put in working order. The chief expenditure was on the Hunsur-Nagarholle road, 30 miles of which were thoroughly repaired at a cost of Rs. 591 or an average of Rs. 19—11—2 per mile.

22. The total expenditure under roads was Rs. 1,011, the details of which are as follows :—

Titimatti Bridge ..	27	0	0
Do road ..	66	0	0
Karmad Bridge ..	5	0	0
Do road ..	27	0	0
Nalkeri road ..	65	0	0
Hunsur-Nagarholle road ..	591	0	0
Kolianda road ..	34	0	0
Dubare Bridge ..	6	0	0
Do road ..	143	0	0
Frazerpet-Somvarpet road ..	5	0	0
Gangwara road ..	1	0	0
Kargodu road ..	2	0	0
Maldare Bridge ..	9	0	0
Do road ..	6	0	0
Herikeri road ..	14	0	0
Anekadu road ..	9	0	0
Kootampolle road..	1	0	0
Total Rs....	1,011	0	0

Buildings.

23. Two rest houses for Inspecting Officers at Ramasawmy Kanuve and Banawara were commenced but not completed during the year. The amount shown in the accounts was Rs. 716.

24. The following buildings were completed during the year :—

1. A house for two Guards at Banawara sandal plantation, with a room for the Ranger, and one for the Forester, at a cost of Rs. 372.

2. A house at Dubaré for the Forester at a cost of Rs. 65.
3. Cooly lines at Merkara at a cost of Rs. 160.
4. A Guard's house at Kattepura at a cost of Rs. 100.

25. The following buildings were commenced but not completed :—

1. Kootampolle Ranger's house—Rammed earth walls and tiled roof, cost during the year Rs. 694, will be completed before the end of January.
2. Forester's house at Titimatti—Rammed earth walls and thatched roof, cost during the year Rs. 50.
3. Forester's house at Nagarholle—Similar to that at Titimatti, cost during the year Rs. 57.
4. A rest house at Ramasawmy Kanuve—Sun-dried brick walls, and tiled roof, costing during the year Rs. 494.
5. A similar house as No. 4 at Banawara, costing during the year Rs. 220.

26. A considerable outlay was also incurred in repairing existing buildings, the more important works being :—

1. Flooring 2 rooms of the Frazerpet Sandal Koti Rs. 107,
2. Partly re-constructing and re-thatching the Aramane rest hut Rs. 79.

Other Works.

27. The bund of the tank at Mawkal being partially destroyed by elephants was repaird at a cost of Rs. 60.

28. The well sunk at Banawara at a cost of Rs. 145 fell in during the rains and must be reconstructed—care being taken to have it lined with slab stones.

29. The Kargodu well which was commenced in 1890—91 has only been half completed owing to the great difficulty experienced in getting expert well diggers. The cost so far has been Rs. 70—12—0, of which amount Rs. 57 were spent during the year.

Protection of Forests from Injury.

General protection and breaches of Forest Law.

30. The number of prosecutions was 26, involving 56 persons, convictions in 14 cases involving 26 persons were obtained. None of these cases were serious. Several cases of damage to sandal trees were reported but none of them were intentional. Compensation from persons causing the damage was in most cases recovered by the Commissioner.

31. One thousand five hundred and thirty cattle were impounded for illicit grazing during the year as compared to 2,843 in the previous year.

32. The number of cases compounded was 191 against 12 in the previous year—this large increase is due to more cases of illicit grazing being compounded.

33. The decrease in the number of cattle impounded, is due to the cattle in the compounded cases not having been entered in the returns.

34. The percentage of convictions was 53·84 against 72·22 in 1891—92, the falling off being due to want of knowledge on the part of the prosecuting officer as explained in last year's report.

Protection from fire.

35. The amount of expenditure on fire-protection was Rs. 6,230, against Rs. 5,290 in the previous year or 9·83 pies per acre against 8·87 pies per acre in 1891—92.

36. During the year the area attempted to protect was 1,31,155 acres as compared with 1,30,715 acres in 1891—92, the increase being due to a larger portion of the forest surrounding the Kootampolle teak plantation being fire-protected.

37. There were 42 fires, burning 9,586 acres, as compared to 34 burning 16,274 acres in 1891—92.

38. The area successfully protected was 1,21,569 acres against 1,14,441 acres in the previous year, the percentage of area burnt to area attempted during these years is therefore 7·31 and 12·45 respectively.

39. The increase in cost from 8·87 pies per acre in 1891—92 to 9·83 pies in the year under review is entirely due to the cost of widening the firelines, and greater attention having been paid to this most necessary work.

40. From careful enquiries made on the spot the 42 fires may be put down to the following causes:—

	No. of fires.	Area burnt in acres.
Unburnt lines and carelessness of Forest officials ..	8	1,800
Passers by	12	1,500
Incendiary but not considered wilful	15	4,853
Wilful incendiarism	6	1,423
Accident	1	10
Total....	42	9,586

The following list gives the details of these fires :—

No.	Forest.	Date of occurrence.			Area burnt.	Remarks.
1	Malambi	2	5	1893	4½	Incendiarism not wilful.
2	Anekadu	7	4	"	51	Carelessness
3	Attoor	8	4	"	15	Do
4	North Dubare	3	4	"	1,700	Incendiarism not wilful.
5	South Dubare	18	2	"	45	Unburnt lines.
6	Do	24	3	"	42	Do
7	Do	25	3	"	30	Incendiarism not wilful.
8	Do	2	4	"	111	Unburnt lines.
9	Do	7	4	"	3	Incendiarism not wilful.
10	Do	11	4	"	60	Do do.
11	Devamachi	23	4	"	30	Wilful incendiarism.
12	Mawkal	6	3	"	30	Carelessness.
13	Do	7	3	"	20	Incendiarism not wilful.
14	Do	22	3	"	300	Passers by.
15	Do	23	3	"	200	Do.
16	Do	2	4	"	250	Do.
17	Do	14	4	"	60	Incendiarism not wilful.
18	Arkeri	5	3	"	100	Wilful incendiarism.
19	Do	18	3	"	25	Do do.
20	Do	20	3	"	120	Passers by.
21	Do	21	3	"	262	Incendiarism not wilful.
22	Do	23	3	"	40	Passers by.
23	Do	4	4	"	50	Do
24	Do	6	4	"	1,500	Unburnt lines.
25	Do	7	4	"	738	Wilful incendiarism.
26	Do	8	4	"	110	Do
27	Do	9	12	1892	4	Incendiarism not wilful.
28	Do	15	3	1893	200	Do do.
29	Do	30	3	"	50	Passers by.
30	Do	21	3	"	10	Accident.
31	Do	24	3	"	20	Passers by.
32	Hutgat	26	2	"	3	Incendiarism not wilful.
33	Do	14	3	"	200	Passers by.
34	Do	26	3	"	30	Do
35	Do	6	4	"	1,500	Incendiarism not wilful.
36	Do	10	4	"	1,000	Do do.
37	Nalkeri	3	4	"	2	Do do.
38	Do	4	4	"	220	Passers by.
39	Do	8	4	"	6	Carelessness.
40	Do	12	4	"	420	Wilful incendiarism.
41	Do	14	4	"	20	Passers by.
42	Kootampolle	6	2	"	4½	Incendiarism not wilful.
	Total.....	...			9,586	

41. Owing to the failure of rain in the months of December and January, and to the prevalence of strong east winds during the early part of March, the year was not a favourable one for fire-protection. The largest fires took place between the 3rd and 10th April in the North Dubare, Arkeri and Hutgat Forests. The fire of the 6th April in Arkeri was caused by fire crossing over from the Mysore Territory—where our line had not been cleared and burnt. The fires in Arkeri, Hutgat and Nalkeri were unquestionably caused through the carelessness of cartmen, incendiaries, or by wandering Kurumbars.

Regulation of grazing and protection from cattle.

42. The number of cattle grazed was 17,245 against 15,802 in 1891—92, of this number 8,944 grazed of right and the remainder 8,301 on payment of fees, of the latter number 567 were buffaloes and 7,734 cows.

43. The following statement shows the number of cattle grazed in each reserve :—

Forest	By right.		On payment of fees.	
	Buffaloes.	Cows and bullocks.	Buffaloes.	Cows and bullocks.
Mensabetta	...	...	...	89
Malambi	...	...	8	641
Nidta	...	...	102	1,963
Yedavanad	...	...	430	690
Gadinad	...	139	...	...
Jainkal	...	..	...	1,151
Attoor including Bendabetta	...	512	...	360
Dubare	...	100	...	386
Devamachi	...	85	...	836
Mawkal	...	12	27	704
Urti, Kerti	...	497	...	...
Anekadu including Bactancotte	...	1,671	...	838
Arkeri	...	2,305	...	...
Hutgat	...	1,456	...	...
Nalkeri	...	2,167	...	76
Total.....	...	8,944	567	7,734

44. The revenue derived from this head during the year was Rs. 2,331 including pound-keepers' pay credited to revenue against Rs. 2,452—2—0 in 1891—92.

45. The number of cattle belonging to the Madras Government to which free grazing was allowed in the Hutgat Reserve was 2,311.

Improvements of Forest Growth.

Natural Re-production.

46. Natural re-production continues to be most discouraging owing to over grazing in those forests burdened with grazing rights and to the yearly damage done by fires. In the forests of South Coorg re-production is practically nil. In Anekadu, Dubare. Attoor and Yedavanad, in those parts closed to grazing the re-production of Teak, Honne (Pterocarpus Marsupium) and Matti (Terminalia tomentosa) is fair.

Artificial Re-production.

47. The principal additions to plantations during the year were as follows :—

Sandal.

	Acres.
Gangwara Plantation	40
Kargodu Plantation	15
Hurlikal Plantation	30
Bikkihare cultural operation	69

TEAK.

	Acres.
Kootampolle Plantation	56
Dubare cultural operation	20
Mawkal cultural operation	57

The total area now under plantations is as follows :—

Sandal	610
Teak	1,036
Firewood	180
Cultural operation (sandal)	154
Do Do (Teak)	117
	2,097

The cost of the various operations was :—

	Per acre.
Regular Sandal Plantations	23 15 7
Do Teak Do	14 8 10
Cultural operation (sandal)	2 2 6
Do (teak)	2 12 10

48. The sandal plantation work of the last and present rains was on the whole successful; care being taken to have the sowings finished before the end of May, thus giving the plants sufficient time to establish themselves before the next hot weather.

49. The sandal cultural operations in Bikkihare were very successful, the seed germinating in almost every pit. Rats and squirrels have done damage but not to the same extent as in the sowings of 1890—91.

50. The teak plantation at Kootampolle was extended in the last rains by 56 acres, it was however a failure as all the plants died and had to be re-placed in May and June of this year. These plants are doing well but their success depends a good deal on the occurrence of rain in the months of December and January.

As an experiment young teak plants were raised in a nursery and then planted out in the forest in cleared lines.

During the rains of 1892, 10 acres, and in the rains of 1893, 30 acres, were thus planted out, but the result was a total failure as not a single plant succeeded. The cause of failure was want of light, and excessive rain, some 230″ of rain having fallen.

51. Besides these extensions the following work was done :—

(i). Weeding the 1888—89, 1889—90 and 1890—91 plantations and filling in blanks in Kootampolle.

(ii). Transplanting 1,500 teak plants in compartment No. 1—10, in Hutgat, and weeding 20 acres of Kanthoor Kumri in Western Hutgat.

(iii). Filling in blanks of the 1888—89, 1889—90 and 1891—92 plantations, cutting of climbers, repairing the fence in Kargodu plantation.

(iv). Erecting barbed wire fence on the eastern and western sides of Gangwara plantation, cutting climbers and filling in blanks.

(v). Weeding and filling in blanks in Hurlikal plantation.

(vi). Repairing the fence and freeing the heads of young sandal in Herikeri.

KUMRI.

52. The 50 acres Kumried in the Mawkal forest during the rains of 1892 and the rains of this year were very successful—there are at present some 25,000 strong healthly plants on the area—the Kumri in the Hutgat forest is also doing well, there being between 6,000 to 7,000 strong healthly plants sown on the area.

I cannot understand the remarks of Mr. Foster in his report for last year, *vide* paragraph 62, in which he states that the 15 acres Kumried in Mawkal is a complete failure.

I consider the "Kumri" to be a most perfect success, all the rows were fully stocked, many of the two years old plants being over 6 feet high and everywhere the young teak are overtopping the surrounding undergrowth, and are most healthy and thriving.

Cutting Climbers.

53. During the year climbers were cut and cleared in 890 acres at a cost of Rs. 258 as deatiled in the following statement:—

Forest.	Acres.	Cost.
Dubare	175	86 0 0
Nalkeri	57	123 0 0
Karmad	80	6 0 0
Anekadu	48	12 0 0
Yedavanad and Gadinad	500	22 0 0
Bikkihare	30	9 0 0
Total....	890	258 0 0

Besides this, 23,100 teak plants were freed from weeds at a cost of Rs. 102—8—0.

54. Under heads, early thinnings and experiments, there is nothing to report.

Exploitation of Major Forest Produce.

Selection Fellings.

55. According to the plan of operations it was proposed to exploit 1,081 trees by selecting over-mature and badly grown trees.

The following form shows that the plan was closely adhered to—a smaller number of trees was felled, but the gross out-turn was considerably larger than anticipated:—

Forest or Range.	Prescribed in Plan.		Result of operation.		Remarks.
	No. of trees.	C. ft.	No. of trees.	C. ft.	
Hutgat	500	17,000	439	16,444	
Nalkeri	370	11,000	402	16,492	Demand for Nandi.
Dubare	200	4,000	146	5,921	
Anekadu ...	11	500	58	1,511	More demand for timber at Merkara by Public Works Department.
Total.....	1,081	32,500	1,045	40,368	

Extraction and Transport of Major Forest Produce by Land and Water.

56. All timber is felled by departmental agency, whether sold to purchasers, or sent to depôt.

During the year the carting contractor removed 32,698 c. ft., as compared to 72,352 c. ft., for last year.

The quantity of timber sold to purchasers in the forests was 4,88,769 c. ft., as compared to 5,08,487 in the previous year.

57. The following statement shows the quantity of timber, &c., exported during the year :—

Description of timber &c.	Quantity. No.	Quantity. C. ft.	Amount.		
Teak logs	890	26,741	26,226	11	3
Honne logs	962	26,644	18,514	9	0
Beti logs	80	2,634	1,732	5	2
Nandi ... ... / Otherwood	333	7,154	2,775	14	3
Ebony, Ainee, Agilu, Irpoo, Jack	162	5,812	2,679	9	8
Miscellaneous poles	19,632	...	9,995	13	0
Sandalwood	180 tons	...	80,730	3	5
Bamboos	3,60,272	...	2,327	1	5
Cardamoms	...	...	28,028	10	0
Minor forest produce	...	...	1,094	3	2
Total.....	3,82,511	68,985	1,74,105	0	4
From Private Lands.					
312 trees at 50 c. ft. per tree at 0-8-0 per c. ft. ...	312	15,600	7,800	0	0
197 otherwood poles at 4½ c. ft. per pole and at 0-6-0 per c. ft.	197	886	332	4	0
5,300 bamboos at Re. 1 per 100	5,300	...	53	0	0
Total.....	5,809	16,486	8,185	4	0
Grand total.....	3,88,320	85,471	1,82,290	4	4

CHAPTER III.

Gross yield and out-turn of Forest Produce.

58. The total quantity of timber and other produce cut and removed during the year is shown below :—

	Timber in c. ft., including Sandalwood		Fuel in c. ft.		Bamboos number.		Minor produce value in rupees.	
	1891—92	1892—93	1891—92	1892—93	1891—92	1892—93	1891—92	1892—93
By Government Agency...	83,251	57,956	...	...	7,595	2,200	...	...
By purchasers (including confiscations) ...	3,12,487	2,67,869	1,96,000	2,20,900	4,65,367	3,60,272	1,107	1,641
Free grants	3,106	16,486	...	...	2,625	5,300	...	...
Total.....	3,98,844	3,42,311	1,96,000	2,20,900	4,75,587	3,67,772	1,107	1,641
Increase and decrease in 1892—93 as compared with 1891—92 ...	...	—56,533	...	+24,900	...	—107,815	...	+534

It will be seen from the above that the removals of timber and bamboos are less than those of 1891—92. The cause of the decrease as regards timber is owing to the carting contractor not being able to get carts during the working season as at that time there was a severe out break of cholera in and around Hunsur, from whence carriage is obtained.

Departmental Operations.

59. The following statement shows the yield of the forests by departmental agency as compared with that of 1891—92 :—

Year.	Timber, c. ft.	Sandalwood. Tons.	Sandalwood. C. ft.	Bamboos.
1891—92	7,6231	175¼	7,020	7,595
1892—93	50,386	189¼	7,570	2,200

60. The difference between the quantity of timber felled in 1892—93 and that felled in 1891—92 is due to all fellings being stopped in the reserved forests on the east of Coorg for the reasons stated in paragraph 82 of the report for 1891—92.

61. The following quantities of timber were sold from forest and sale depôts as compared with 1891—92.

Year.	From sale depots.	From forest depots.	Total.
1891—92	73,500	2,054	75,554
1892—93	58,866	7,430	66,296

62. The average sale rates were slightly higher than in the previous year as will be seen from the following statement.

Year.	Timber per c. ft.			Honne. per c. ft.			Blackwood per c. ft.			Other woods per c. ft.		
1891—92	0	12	11	0	9	3	0	10	1	0	6	9
1892—93	0	15	6	0	11	0	0	10	6	0	6	3

Sandalwood.

63. During the year Rs. 5,739—12—9 were expended in collecting 189¼ tons of sandalwood, giving an average of Rs. 30—5—3 per ton, as compared with Rs. 35—2—0 per ton for 1891—92. The selling price per ton was Rs. 448—8—0 as compared with Rs. 412—11—8 for 1891—92.

REMOVAL OF PRODUCE BY PURCHASERS.

64. The subjoined abstract shows the quantity of timber and other produce removed by purchasers compared with the results of the previous year.

Year.	Timber c. ft.	Fuel cf. t.	Bamboos No.
1891—92	3,12,487	1,96,000	4,65,367
1892—93	2,67,869	2,20,900	3,60,272

FREE GRANTS

65. The following free grants were made during the year as compared with those of the previous year.

Year.	Trees of kinds.	Poles.	Bamboos.
1891—92	56	68	2,625
1892—93	312	197	5,300

WASTE LAND RULES.

66. The number of timber valuations made by the Range Officers was 336 against 153 in the previous year and the value collected was Rs. 12,301—8—5 against 11,663—1—0 in 1891—92.

Cardamom Malles.

67. The revenue realized under this head was Rs. 28,029 against Rs. 30,154 in 1891—92. Last year the Chief Commissioner sanctioned the writing off of Rs. 7,941—13—2 arrear rent due as being irrecoverable. Again this year owing to the poverty of the malle-holders and to the low and unsatisfactory state of the cardamom market, further remissions have had to be made, and under sanction the large sum of Rs. 12,715—3—5 was written off. Every effort was made to collect as much of the outstanding as possible, and the result was that at the close of the year only Rs. 1,149—12—11 remained uncollected.

Minor Produce.

68. The right to collect minor produce was sold by auction, and realized Rs. 1,641 against Rs. 1,107 in the previous year.

CHAPTER IV.

Financial Results.

69. The revenue and expenditure of the three main budget heads for the 15 months comprising the year is as follows :—

Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvements of forests.	Total.		Surplus.
Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
1,34,742	34,226	63,224	8,991	47,840	1,97,966	91,057	1,06,909

70. In order that comparisons may be drawn between the revenue and expenditure of the year 1891—92 the figures for the financial year are given in the subjoined statement.

Year.	Receipts.	Expenditure.	Surplus.
1891—92	1,82,897	86,860	96,037
1892—93	1,80,676	73,091	1,07,585
Decrease or increase	—2,221	—13,769	+11,548

71. From the above it will be seen that the receipts of 1892—93 are less than those of the previous year by Rs. 2,221, but owing to less expenditure the net surplus is Rs. 11,548.

72. The expenditure was 40·45 per cent of the revenue.

73. The principal increase was Rs. 12,845 under head RI (d) sandalwood, owing to a larger quantity of wood being collected and better prices being realized than in 1891—92.

74. There was a decrease of Rs. 4,103 under head RI (a) timber, owing to a smaller quantity of timber being sold from depôts than in the previous year, and of Rs. 8,892 under head RII (c) cardamoms as explained in paragraph 67.

75. The following increases and decreases under expenditure also occurred.

AI (a) decrease of Rs. 6,360-9-6 as, owing to the severe outbreak of cholera, less timber was carted to the Hunsur depôt.

AVIII (a) decrease of Rs. 2,444-12-0 owing to less work being done than was anticipated.

AVIII (c) Surveys, decrease of Rs. 4,249—14—6 owing to Rs. 1,100 not being charged in the accounts of March 1893, and the remainder to there being only one head surveyor and 2 amins employed during the year, instead of the full establishment.

BI (b) Increase of Rs. 2,238—11—4, owing to an Extra Assistant Conservator being appointed from August 1892 and to the Deputy Conservator drawing 1st grade allowance.

BI (c) Decrease of Rs. 1,660—10—11, owing to the subordinate Forest Staff not drawing the maximum pay sanctioned. Contingencies show but slight differences.

CHAPTER V.

Forest Administration.

Establishments.

76. The subordinate establishment was strengthened by the addition of two Rangers (passed students of Dehra dun) one permanent and the other temporary.

77. Eighty-one members of the staff were punished during the year as detailed in Appendix C.

78. Ranger P. Atchaiyah was reduced two grades for carelessness in connection with a fire.

79. Ranger Medappa was also reduced for purchasing an estate without permission.

80. Forester N. Appaia was dismissed for neglect of duty and carelessness in connection with the sandal koti.

81. Forester C. K. Thirmal Rao was dismissed for not reporting a fire which occurred in his sub-range.

Forester K. Devaia was dismissed for being absent without leave.

82. Fourteen foresters were fined, 1 resigned; and amongst the guards, 6 were dismissed, 24 fined, 17 deserted and 10 resigned and one suspended.

CHAPTER VI.

General Remarks.

83. As I only took over charge of the Coorg Division on the 8th of August 1893, I have in the body of the report confined myself entirely to facts and data obtained from the office and observations made during three short tours in the district, but I think it necessary to add the following general remarks, in which I believe the Commissioner also concurs.

84. The present system of boundary marks is very unsatisfactory, *vide* paragraph 7 of the report for 1891—92, they are not only costly, but are far from durable, and will constantly require renovating. I would suggest that wherever possible, stone cairns and posts should be erected.

85. I fully endorse Mr. Foster's opinion expressed in paragraph 39 of last year's report that up to 1892, practically speaking there was no organized system of fire protection in Coorg. Much has been done during the year under report to widen and clear the exterior lines, but even this important work is not yet completed, and as to cleared interior firelines they do not exist.

Every effort will be made by me to protect the forests from fire, and without now going into details I hope next year to show better results. It is useless starting teak and sandalwood plantations, or to carry out working plans, when our forests are annually ravaged by some thirty or forty fires, and all other works must for the next few years be made subordinate to the more important one of fire protection.

86. It is a matter of regret, as well as of earnest enquiry, that our teak and sandalwood plantations and also the young teak in the "Kumri" areas have been attacked by the "Borer" insect. Numerous sandal trees of 8 or 10 years growth and some splendid 2 years old teak shoots in the Kumri of 1891

have been completely killed. I have sent specimens of the insect and of the damaged wood and shoots to Mr. Richter of Merkara who is specially studying the habits of the Borer, and I also will enquire more closely into the matter, as the future success of our sandalwood plantations greatly depends on the eradication of this pest.

87. In paragraph 66 of last year's report Mr. Foster laid stress on the necessity of making forest roads, but apparently took no further steps in the matter. I consider that not only are roads useful for bringing in revenue, and for purposes of inspection, and supervision, but they are absolutely necessary if we are to have successful fire conservancy, and it is also the duty of the department to see that all roads passing through the forests are kept in such order that they can be used by the general public. I trust to show a considerable outlay on roads and buildings during the year.

88. As regards sandalwood, that all important item of forest revenue in Coorg, I venture to think that Mr. Foster's opinion regarding the annual yield was far too sanguine.

In the revised estimate of 1892—93 it was expected that 200 tons would be collected, whereas the actual amount was 189 tons.

In 1893—94 the out-turn has also been estimated at 200 tons, but I very much doubt if we shall collect more than 160 tons. The Commissioner and myself both agree that the estimate for 1894—95 should be placed at 150 tons.

In 1883—84 Mr. Dickinson had a careful enumeration made of all the sandalwood trees in Coorg and estimated that taking 32½ trees to the ton that 68½ tons of sandal could be annually collected for the next 12 years. It will therefore, I submit, be impossible to annually collect just three times this amount.

The whole subject of the collection and out-turn of sandal will receive special attention during the year, and I hope to be able to give more accurate details in my next report.

89. Not only do I anticipate a serious decline in the revenue from sandal but the state of the cardamom malle-holders is so bad that a very large reduction in the revenue from this source will have to be faced.

The subject is receiving the earnest attention of the Commissioner and myself, but the present outlook is most gloomy.

90. All Forest Officers who have held charge of Coorg declaim against the forest subordinates, and I must say that the present staff does not seem very promising, but that out of a staff of 123 men, 40 should have been fined, 9 dismissed, 2 degraded, 2 suspended, 17 deserted and 11 resigned, leads me to think that better results may be obtained by more frequent contact with the men, studying their comforts, prompt recognition of good work, and constant supervision by myself and the Extra Assistant Conservator.

As regards the office establishment I regret to note that it was completely out of hand, but signs of improvement are already visible.

I have to thank Mr. Seager for valuable assistance rendered in preparing this report.

MERKARA,
The 19th September 1893.

J. PREVOST,
Deputy Conservator of Forests, Coorg.

List of Appendices to the Forest Report for 1892—93.

Form No.	Name of Form.
	Annual Returns.
46	Area of reserved forests, &c.
47	Progress made in &c., on forest settlement.
48	Demarcation and maintenance of boundaries.
49	Forest areas surveyed and under survey.
50	Progress made in working plans.
51	Communications and buildings.
52	Prosecutions for breaches of Forest Law.
53	Area of forest tracts protected from fire.
54	Areas open and closed to grazing.
55	Value of grazing in state forests.
56	Area of plantations.
57	Outturn of timber and fuel.
58	Outturn of minor forest produce.
59	Annual account of timber, &c. in depots and sold locally.
60	Annual abstract showing the value of timber and produce at sale depots.
61	Annual summary of revenue and expenditure.
62	Annual account current.
63	Annual statement of outstandings on account of revenue.
64	Annual statement of outstandings & liabilities on account of contractors and disbursers.
65	Annual statement of financial results.
	Appendices.
A	Survey Report of September 1892.
B	Cost of plantations from commencement.
C	Subordinates punished.

FORM No. 46.

FOREST DEPARTMENT, COORG.

Area of reserved forests, protected forests, unclassed State forests and waste lands for 1892—93.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	No. and date of notification of addition or transfer &c.	Remarks.
			RESERVED FORESTS.								
Coorg.	North Coorg.		Kattepura	585	1	..		585	1	Chief Commissioner's Notification No. 6 dated 22nd February 1893.	
			Menasabetta ..	276		.	...	276	.		
			Alur	395	1		...	395	1		
			Malambi	3,732	6	...		3,732	6		
			Nidta ..	2,688	4	50		2,738	4		
			Yedavanad	2,871	4	...	...	2,871	4		
			Gadinad and Chika Hudugur	4,000	6	.	.	4,000	6		
			Jainkal	1,267	2	294	...	1,561	2	Do No. 37 dated 11-7-92.	
			Attur including Bendebetta	5,154	8		.	5,154	8		
			Dubare	11,363	18			11,363	18		
	South Coorg.		Devamachi	9,392	15		...	9,392	15		
			Mawukal ..	8,281	13			8,281	13		
	Kutompole.		Urti and Kerti	19,200	30		..	19,200	30		
			Arkomale	2,500	4		...	2,500	4		
			Keepalli .	800	1		...	800	1		
	Merkara.		Merkara firewood reserve	227	..	97	...	324	1	Do No. 250 dated 29-6-92.	
	North Coorg		Frasorpet Holegeri sandal reserve	5	...	...	...	5	...		
			Do Gandadagundi do .	28	...	.	..	28	...		
			Total .	72,764	113	441	...	73,205	114		
			PROTECTED FORESTS.								
	Ghat.		Ghat forests .	1,94,460	304	*25,009		2,19,469	343		*Survey computation or completion of work.
	North Coorg		Urudwes, paisaries and Devarakadus ...	1,94,504	304		†1,179	1,93,325	302		†97 acres Merkara, 50 acres to Nidta, 294 to Jainkal, 738 excluded owing to Waste Land sales.
			Anekadu including Bactankote ..	7,590	12			7,590	12		Forests temporarily classed as Protected.
	South Coorg		Arikeri .	18,262	29			18,262	29		
			Hatgat	27,520	43	.		27,520	43		
			Nalkeri	26,075	40	..	.	26,075	40		
	Ghat ...		Chembu and Quinad	6,400	10	..	...	6,400	10		
			Total	4,74,811	742	25,009	1,179	4,98,641	779		
			Grand Total	5,47,575	855	25,450	1,179	5,71,846	893		

FORM No. 47.

Statement showing the progress made in, and expenditure incurred on, forest settlements during 1892—93.

Division.	Name of Civil district or territory.	Areas finally settled at commencement of the year	Areas finally settled during the year. No. and date of Government order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled. In forest accounts.	In other accounts.	Entire cost per square mile of areas finally settled during the year.	Areas undergoing settlement. At commencement of the year. Name of forest.	Area in square miles	Taken in hand during the year. Name of forest.	Area in square miles	Expenditure incurred during the year on areas under going settlement. In forest accounts.	In other accounts.	Remarks
Coorg.	Merkara Firewood Reserve.	227 acres or ⅓ square mile.	Chief Commissioner's Notification No. 25, dated 29th June 1892.	1st Bit.	97 acres 1/6 square miles.										No expenditure incurred as the Assistant Commissioner Mr. Bellappa was deputed to settle the right of way.

FORM No. 48.

FOREST DEPARTMENT, COORG.

Record of demarcation and maintenance of boundaries.

Division.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries not demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year. On new work.	Expenditure on demarcation during the year. On repairs	Remarks.
Coorg .	71	337	209½	617½	..	28½	...	1,176	550	

FORM No. 49.

Statement of forest areas surveyed and under survey during the year 1892—93.

Division.	Area surveyed and under survey during the year.																																	Areas remaining to be taken under survey.	Total forest area at end of year as per Form No. 46.	Cost.			Remarks.
	Special surveys, maps, on 4 inch scale or over by survey of India Department or Forest Survey Branch.								Ordinary included in district surveys.								Chain and compass or other surveys by local officers.																					
	With interior deteils.					Boundary surveys.			With interior details.					Boundary surveys.			With interior details.					Boundary surveys.															
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.						4 inch or over.		Under 4 inch																		
	Previous.	Of year.	Previous	Of year.	Total cost.	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Tot.l cost.	Previous.	Of year.	Total cost.														
	Sq. M.	Sq. M.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	R.	Sq. M.	Sq. M.	R.	R.	R.									
	RESERVED FORESTS.																																				
Coorg.	13		66	..	.		...		..		.			...		.		.			.	.	.	.	..	114	5,601		5,601								
	PROTECTED FORESTS.																																				
	83		41		...	..	...	.		.	.		.	..	..	.		..	.	...	.	...	.	3,482	302	779	12,408	6,872	22,762								
Total . .	96		107	...	...	..	...	..	.	.	..	.	..	.	..		...		..	..	...	...	..	3,482	302	893	18,009	6,872	28,363								

FORM No. 50.

Progress made in Working Plans.

Division.	Areas for which working plans have been completed. At commencement of year.	Areas for which working plans have been completed. During year.	Areas for which working plans are being completed. At commencement of year.	Areas for which working plans are being completed. Taken in hand during year.	Areas for which working plans have still to be taken in hand.	Total forest area as in Form No. 46.	Entire cost per square mile of working plans completed.	Remarks.
	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	R.	
	RESERVED FORESTS.							
Coorg.	13	...	33	8	60	114	36	
	PROTECTED FORESTS.							
	83			12	684	779	74	
	96	.	33	20	744	893	104	

FORM No. 51.

FOREST DEPARTMENT, COORG.

Communications and Buildings.

Division.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings		Roads and Paths.				Buildings.		Roads and Paths.			
	Description of Buildings.	Expenditure incurred.	Road or Path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new work.	Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	Total expenditure incurred on repairs.
		R.		Miles.	R.	R.		R.		Miles.	R.	R.
Coorg.	Frasarpet Bungalow	...			.	...	Re-roofing, white washing, clearing compounds and drainage work.	6	Filling in ruts, making side drains, repairing bridges and lopping branches of trees over hanging the roads.	3	5	11
	Kargodu do	..		...		...		67		½	2	69
	Hurlikal do	..	Hunsur-Nagarahole road to cart timber from forest to Depot.	30	591	591		2		.	...	2
	Maldare do	.		...	..	.		7		3	15	22
	Kootompollo do .	654		.	...	654		...		½	1	1
	Nalkory do .. .	...		...	.	...		62		27	65	127
	Aramane bane do			...				79		...	...	79
	Kanave do . ..	494		...		494		...		..	...	...
	Kolianda do ..	...		..	..	..		25		18	34	59
	Tittimatti Forester's house . ..	50		..	.	50		..		43	93	93
	Anekadu do . .	.		...	..	..		126		6	9	135
	Dubare do	65		...	...	65		...		48	149	149
	Herekere do . ..	...		...	...	.		18		10	14	32
	Nagarahole do	57		...	..	57		...		...	...	...
	Banawara Lodge do .	220		...		220		..		..	...	...
	Do Ranger do	372		...	...	372		...		...	...	...
	Merkara Coely lines .	160		...		160		.		...	...	...
	Sandal Kotl			.	.	.		107		...	...	107
	Gangwara Forester's house.	...				..		52		½	1	53
	Cattepura Guard's . ..	100		...		100		...			32	32
	Karmad Forester's . .	...		...	...	...		42		20	..	42
	Arkery do	...		...	...	...		20		..	..	20
	Total . ..	2,212		30	591	2,803		613		179½	420	1,033

FORM No. 52.

Register of breaches of Forest Rules during 1892—93.

Forest Division.	Cases pending from 1891—92.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.	Remarks.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.			
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
A	...	3	16	4	3	26	26	14	26	11	29	25	55	1	191 compound cases.
B .	..	..	...	191	...	191	191	...	...	..	...	...	...	...	
Total .. A .	..	3	16	4	3	26	26	14	26	11	29	25	55	1	
Total .. B	...	..	...	191	.	191	191	...	...	...	...	...	...	...	

FORM No. 53.

FOREST DEPARTMENT, COORG.

Area of forest tracts protected from fire during 1892—93.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 30th June 1893.	During dry season of 1892. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season.	Remarks.
Coorg.	Kattepura ...	1889	585	585	...	585	70	
	Mensabotta ...	1877	276	276	.	276	260	
	Alur ...	1889	395	395	..	395	...	
	Malambi ...	1878	3,715	3,732	4	3,728	297	
	Nidta ...	1878	2,688	2,738	...	2,738	269	
	Yedavanad and Gadinad ...	1878	6,871	6,871	...	6,871	691	
	Jallikal and Bikki Hari ...	1878	1,562	1,561	...	1,561	165	
	Anekadu including Bactonkote ...	1878	7,528	7,590	51	7,539	468	
	Attur Do Bendebetta ...	1876	4,985	5,154	15	5,139	313	
	Dubari ...	1877	7,883	11,363	1,700	9,663	509	
	Devamachi and Mawnkal ...	1878	16,183	17,673	1,336	16,337	992	
	Tittimatti sandal plantation ...	1883	25	25	...	25	...	
	Arkori ...	1878	15,476	18,262	3,074	15,188	534	
	Hatgat ...	1878	19,846	27,520	2,753	24,767	648	
	Nalkeri ...	1878	25,482	26,075	648	25,427	564	
	Kutompole teak ...	1881	586	978	5	973	105	
	Merkara fuel ...	1883	321	324	...	324	276	
	Fraserpet sandal ...	1881	34	33	...	33	69	
	Total ..	..	1,14,441	1,31,155	9,586	1,21,569	6,230	

FORM No. 54.

Area closed and open to grazing during 1892—93.

Division.	Area in square miles. Closed to animals. Whole year.	Closed to animals. Part of year.	Closed to browsers (camels, goats, or sheep.) Whole year.	Closed to browsers (camels, goats, or sheep.) Part of year.	Open to all animals. Whole year.	Total area.	Remarks.
			RESERVED FORESTS.				
Coorg	5	109	114	...	...	114	
			PROTECTED FORESTS.				
	.	..	779	...	...	779	No check on grazing yet instituted over the ghat forests.
Total .	5	109	893	...	...	893	

FORM No. 55.

Return of grazing in the State forests of Coorg during 1892—93.

Division.	Grazing on payment. Number of animals. At full rates. Buffaloes.	Cows & bullocks.	Goats & sheep.	Camels.	Other animals.	Fees received.	At privileged rates. Buffaloes.	Cows & bullocks.	Goats & sheep.	Camels.	Other animals.	Actuals.	Fee received. Value at full rates.	Grazing free No. of animals. By right under settlement. Buffaloes.	Cows & bullocks.	Goats & sheep.	Camels.	Other animals.	Value of fees at full rates.	During pleasure of Government or otherwise than under settlement. Buffaloes.	Cows & bullocks.	Goats & sheep.	Camels.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.	Remarks.
						R.						R.	R.						R.						R.	R.	R.	
														RESERVED FORESTS.														
Coorg	567	6820	...	...	...	1913	...	...	...	...	...	...	...	...	...	1,345	...	...	336	...	...	...	...	...	...	...	...	
														PROTECTED FORESTS.														
	...	914	...	...	...	240	...	...	...	...	...	...	...	...	...	7,599	...	...	1900	...	...	...	...	...	...	...	...	
Total.....	567	7734	...	...	...	2153	...	...	...	...	...	...	...	...	...	8,944	...	...	2236	...	...	...	...	...	...	...	...	

FORM No. 56. (PRESCRIBED.)

FOREST DEPARTMENT, COORG.

Area of Plantations, 1892—93.

Division.	Name of Plantation.	Area in acres. On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	Receipts of the year.	Charges of the year.	Remarks.
	REGULAR PLANTATIONS.							
	Menzabetta (Gangawara) Sandal..	173	40	...	213	119	1,512	
	Kargodu (Malambi) ,, ..	51	15	...	66	85	384	
	Banavara (Nidta) ,, ...	16	...	...	16	8	36	
	Herikere ,, ...	125*	...	...	125	33	299	
	Hurlikal (Anekadu) ,, ...	41	30	...	71	...	674	
	Attoor-Bakka ,, ...	...	...	...	...	...	...	
	Yarekolly (Anekadu) ,, ...	2	...	...	2	...	...	
	Fraserpet (Gandadagundi) ,, ...	29	...	...	29	...	29	
	Do Holageri ,, ...	5	...	...	5	...	267	
	Dubari (Bungalow) ,, ...	2	...	...	2	...	...	
	Maldare (South Dubare) ,, ...	7	...	...	7	...	...	
	Bambukadu (Tittimatti) ,, ...	25	...	...	25	...	...	
	Balumani (Mawukal) ,, ...	22	...	...	22	...	...	
	Karmad ,, ...	15	...	...	15	...	...	
	Nagarahole (Nalkeri) ,, ...	12	...	...	12	...	...	
	Total Sandal.....	525	85	...	610	245	3,201	
Coorg.	Karepura Teak ...	14	...	...	14	...	...	
	Herikeri ,, ...	11	...	...	11	...	...	
	Hurlikal (Attoor) ,, ...	19	...	...	19	...	...	
	Anekadu ,, ...	66	...	...	66	...	...	
	Dubare ,, ...	28	...	...	28	...	...	
	Maldare ,, ...	18	...	...	18	...	3	
	Tittimatti ,, ...	24	...	...	24	...	...	
	Karmad ,, ...	197	...	...	197	...	46	
	Ammale (Nalkeri) ,, ...	17	...	...	17	...	34	
	Kutompolle ,, ...	586	56	...	642	...	2,353	
	Total Teak.....	980	56	...	1,036	...	2,436	
	FIREWOOD.							
	Merkara	180	...	...	180	...	1,223	
	Total.....	180	...	...	180	...	1,223	
	CULTURAL OPERATIONS.							
	Nalkeri strip teak planting ...	10	...	...	10	...	...	
	Dubare teak sowing	30	20	...	50	...	52	
	Mawukal do ...	...	57	...	57	...	189	
	Nidta sandal	25	...	...	25	...	...	
	Bageri	30	...	...	30	...	...	
	Bikkihari	30	69	...	99	...	184	
	Total.....	125	146	...	271	...	425	
	Grand Total.....	1,810	287	...	2,097	245	7,285	
	REGULAR PLANTATIONS.			Abstract.				
	Sandal	525	85	...	610	245	3,201	
	Teak	980	56	...	1,036	...	2,436	
	Firewood	180	...	...	180	...	1,223	
	Cultural operations	125	146	...	271	...	425	
	Total.....	1,810	287	...	2,097	245	7,285	

FORM No. 57.

Outturn (in cubic feet, solid) of Timber and Fuel during the year 1892—93, and Agency of Exploitation.

Division.	Timber in the rough logs.				Timber in the rough; Poles.				Sawn or squared timber.					Miscellaneous.				Fuel.				Total.
	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Out-turn.
	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.
											I.—Reserved Forests.															
Coorg ..	...	6,100	...	...	6,100	..	88,344	...	...	88,344	50,386	..	...	...	50,386	...	...	...	...	...	..	67,025	.	..	67,025	2,11,855
Total .	..	6.100	...	...	6,100	...	88.344	...	...	88,344	50,386		.	..	50,386	...	...	...	..	...	...	67,025	...	...	67,025	2,11,855
											II.—Protected Forests.															
Coorg ...	...	1,71,485	15,600	.	1,87,085	.	1,650	886	...	2,536	...	..	...	...	..	7,570	340	...	...	7,910	...	1,53,875	..	...	1,53,875	3,51,356
Total...	...	1,71,485	15,600	.	1,87,085	...	1,650	886	...	2,536	...	...	.	.	...	7,570	340	...	...	7,910	...	1,53,875	...	...	1,53,875	3,51,356
Grand Total...	...	1,77,585	15,600	.	1,93,185	...	89,994	886	..	90,880	50,386		..	.	50,386	7,570	340	..	...	7,910	...	2,20,900	..	...	2,20,900	5,63,211

Form No. 58.

FOREST DEPARTMENT, COORG

Out-turn of minor forest produce during the year 1892—93.

Division	Description of produce.	Produce removed or utilized: By Government agency. Quantity	Value.	By purchasers. Quantity.	Value.	By free grants. Quantity.	Value.	By right holders. Quantity.	Value.	Total. Quantity.	Value.	Remarks
			R.	(a)	R	(b)	R		R		R.	
Coorg	Bamboos	2,200	17	3,60,272	2,327	5,300	76	.		3,67,772	2,420	a & b Bamboos removed from waste lands and by free grants refer to protected forests and the remainder to the reserved forests.
	Recoveries on account of cattle pounds		178	.							178	Reserved forests.
	Grazing dues on 567 buffaloes, and cows 7,734	.	2,153								2,153	Reserved forests.
	Cattle admitted by right					.		8,944	2,236	8,944	2,236	Reserved forests.
	Minor forest produce	..		.	1,641				.		1,641	Reserved and protected forests.
	Cardamoms	.		...	28,029	.					28,029	Protected forests.
	Total	2,200	2,348	3,60,272	31,997	5,300	76	8,944	2,236	3,76,716	36,657	

Form No. 59. (Prescribed).

Account of timber and other produce cut or collected by Government agency and brought to sale-depots, or sold locally during the year 1892—93.

Particulars	No. or quantity.	Cubic feet.	Total of each head: No. or quantity	Cubic feet.
Balance at commencement of the year.				
Teak logs	396	6 247		
Honne logs	876	22,073		
Matti logs	135	2,938		
Biti logs	71	1,667		
Nandy logs	150	3,390		
Other wood logs	11	351		
			1,648	36,666
Teak poles	28			
			28	.
Bamboos	2,652			
			2,652	.
Sandal wood.				
Good wood	38½	Tons.		
Inferior wood	7			
			45½	Tons.
Received from the forests in depots.				
Teak logs	596	18,598		
Honne logs	373	11,162		
Matti logs	57	1,110		
Biti logs	36	1,477		
Nandy logs	19	351		
			1,080	32,698
Sandalwood.				
Good wood	143½	Tons.		
Inferior wood	45½	.		
			189½	Tons.
Received from the forests and sold locally				
Teak logs	229	5,628		
Honne logs	29	974		
Matti logs	10	300		
Biti logs	13	382		
Nandy logs	3	146		
			284	7,430
Firewood cart loads	559			
			559	
Bamboos	2,200			
			2,200	
Grand Total	.		8,685½	76,794

Particulars.	No. or quantity.	Cubic feet.	Total of each head: No. or quantity.	Cubic feet.
Removed by purchasers from depots.				
Teak logs	714	22,237		
Honne logs	900	27,175		
Matti logs	106	3,572		
Biti logs	67	2,252		
Nandy logs	107	3,499		
Other wood	5	131		
			2,100	58,866
Sandalwood—Good wood	147	Tons.		
,, Inferior wood	33			
			180	Tons.
Sold locally.				
Teak logs	229	5,628		
Honne logs	29	974		
Matti logs	10	300		
Biti logs	13	382		
Nandy logs	3	146		
			284	7,430
Firewood cart loads	559			
			559	.
Bamboos	2,200			
			2,200	.
Used by the Department.				
Teak logs	17	416		
Honne ,,	1	20		
			18	436
Lost or written off as useless				
Sandalwood.				
Dirage—Good wood	1¾	Tons		
Inferior wood	¼	Tons		
			2½	Tons.
Balance at the close of year				
Teak	261	2,192		
Honne	257	6,040		
Matti	28	5.2		
Biti	40	892		
Nandi	9	196		
Other wood	6	220		
			601	10,062
Teak poles	28			
			28	
Bamboos	2,652			
			2,652	
Sandalwood—Good wood	38	Tons.		
,, Inferior wood	14	,,		
			52	Tons.
Grand Total			8,685½	76,794

FORM No. 60. (PRESCRIBED.)

FOREST DEPARTMENT, COORG.

Abstract showing the value of timber and other produce at sale-depots for the year 1892—93.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No. of logs.	C. ft.	Value. Rs.	No. of logs.	C. ft.	Value. Rs.	In favor of the year.	Against the year.	
Teak logs	396	6,247	4,685	261	2,192	1,644			
Honne logs ...	876	22,073	9,198	237	6,040	2,698			
Biti „	71	1,667	568	28	522	224			
Nandy „	159	3,390	1,272	40	892	320			
Matti „	185	2,038	1,080	9	196	72			
Other wood logs ...	11	351	88	6	220	48			
Teak poles	28		28	28	..	28			
Bamboos	2,652	...	26	2,652	..	26			
Total ..	4,328	36,666	16,945	3,281	10,062	5,060		11,885	
Sandalwood.									
Good wood	38¼	Tons	17,213	38	.	17,100			
Inferior wood ...	7	...	280	14	.	560			
Total.. ..	45¼	..	17,493	52	..	17,660	167		
Grand Total....	4,373¼	36,666	34,438	3,333	10,062	22,720	167	11,885	

FORM No. 61. (PRESCRIBED.)

Summary of revenue of the Coorg Division during the forest year 1892—93.

Budget heads.	Total.		
RECEIPTS.			
I.—Timber and other produce removed from the forests by Government agency—			
a. Timber	52,344	0	0
b. Firewood and charcoal	279	0	0
c. Bambus	17	0	0
d. Sandal-wood	81,992	0	0
e. Grass and other minor produce	110	0	0
II.—Timber and other produce removed from the forests by consumers or purchasers—			
a. Timber	25,701	0	0
b. Firewood and charcoal	1,781	0	0
c. Bambus	2,650	0	0
d. Grazing and fodder grass	2,831	0	0
e. Other minor produce	1,641	0	0
e. Cardamoms	28,029	0	0
III.—Drift and waif wood, and confiscated forest produce			
IV.—Revenue from forests not managed by Government—			
a. Duty on foreign timber and other forest produce	...	...	...
b. Revenue from shared and private forests	.	...	...
V.—Miscellaneous—			
a. Fines and forfeitures	24	0	0
b. Refunds	122	0	0
c. Other sources	945	0	0
Total Receipts.. ..	1,97,966	0	0

I. C. BOSE,
Assistant Comptroller General, Forests.

FORM No. 61. (PRESCRIBED.)

FOREST DEPARTMENT, COORG.

Summary of expenditure of the Coorg Division during the forest year 1892—93.

Budget heads.	Total.		
A.—CONSERVANCY AND WORKS.			
I.—Timber and other produce removed from the forests by Government agency—			
a. Timber	11,468	0	0
b. Firewood and charcoal	...	...	...
c. Bambus	.	.	.
d. Sandal-wood	5,739	0	0
e. Grass and other minor produce	48	0	0
II.—Timber and other produce removed from the forests by consumers or purchasers			
III.—Drift and waif wood and confiscated forest produce			
IV.—Revenue from forests not managed by government—			
a. Duty on foreign timber and other forest produce	...	..	..
b. Revenue from shared and private forests	..	...	
V.—Rent of leased forests and payments to shareholders in forests managed by government			.
VI.—Live-stock, stores, tools and plant—			
a. Purchase of cattle	..	...	
b. Feed and keep of cattle	26	0	0
c. Purchase of stores, tools and plant	1,394	0	0
VII.—Communications and buildings—			
a. Roads and bridges	1,011	0	0
b. Buildings	2,825	0	0
c. Other works	271	0	0
VIII.—Demarcation, improvement and extension of forests—			
a. Demarcation	1,726	0	0
b. Compensation for land and rights			
c. Surveys	6,872	0	0
d. Working plans	63	0	0
e. Sowing and planting	7,285	0	0
f. Protection from fire	7,284	0	0
g. Other works	258	0	0
IX.—Miscellaneous—			
a. Refunds	162	0	0
b. Law charges	36	0	0
c. Other charges	308	0	0
Total A.—Conservancy and Works.....	46,776	0	0
B—ESTABLISHMENT.			
I.—Salaries—			
a. Conservators	..		
b. Superior officers	14,772	0	0
c. Subordinate forest and depot establishments	16,823	0	0
d. Office establishments	5,160	0	0
e. Deputation and special allowances	...	.	.
II.—Travelling allowances—			
a. Conservators	..		...
b. Superior officers	3,135	0	0
c. Subordinate forest and depot establishments	1,901	0	0
d. Office establishments	444	0	0
III.—Contingencies—			
a. Stationery	5	0	0
b. Carriage of tents and records	808	0	0
c. Rents, rates and taxes	50	0	0
d. Pay of police guards		.	.
e. Official postage	653	0	0
f. Sundries	530	0	0
Total B.—Establishment .	44,281	0	0
Grand Total of Expenditure	91,057	0	0

FORM No. 62. (PRESCRIBED.)

Account current for the forest year 1892—93.

Dr.

To cash balance				...		
,, VIII Assessed taxes— Income tax deductions from salaries				513	15	1
,, Revenue as per annual summary Form No. 61	..	.		1,97,966	6	10
,, Forest cash remittances, local— Forest cheques drawn	96,959	2	9			
Inter-Divisional transfers	244	12	8	97,203	15	5
,, Advances recoverable	..			72,518	11	7
,, Account current (other Governments.) Remittances from Government of Madras	80	12	8	80	12	8
,, Inter-Departmental Transfers— P W. D. ordinary branches	27	12	0			
Military Department, Madras	45	0	0			
Civil Department— Jail	222	2	0			
Mathematical Instrument Department	..	..				
Miscellaneous	.			294	14	0
Total Rs				3,68,578	11	7

Cr.

By expenditure as per annual summary, form No. 61				91,057	0	11
,, Forest cash remittances, local— Remittances to Treasuries	1,31,179	5	7			
Inter-Divnl. transfers				1,31,179	5	7
,, Advances recoverable	...			79,500	1	0
,, Suspense	...	..		1	2	8
,, Account current (other Governments)— Remittances to the Government of Madras.	65,960	11	5	65,960	11	5
,, Inter departmental transfers— P W. Department ordinary branches	880	6	0			
,, Civil Department	..	.		880	6	0
,, Cash balance	...	..	..	...	.	
Total Rs	..		..	3,68,578	11	7

I. C. BOSE,

Assistant Comptroller General, Forests.

FORM No. 63.

FOREST DEPARTMENT, COORG.

Revenue received and outstandings on account of revenue for the year 1892—93.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Irrecoverable balances written off.	Cancelled sales.	Total.	Balance due to the department at the end of the year.	Remarks.
Coorg.	I. a. Timber ...	3,680 10 0	51,122 12 8	54,803 6 8	52,313 7 4	...	a)1878 2 3	54,221 9 7	581 13 1	
	b. Firewood ...	...	279 8 0	279 8 0	279 8 0	...	...	279 8 0	...	
	c. Bamboos ...	...	16 8 0	16 8 0	16 8 0	...	...	16 8 0	...	
	d. Sandalwood ...	29 13 8	82,257 2 9	82,287 0 5	81,991 5 5	(b) 29 13 8	...	82,021 3 1	265 13 4	
	e. Grass and other minor produce ...	...	110 7 0	110 7 0	110 7 0	...	...	110 7 0	...	
	II. a. Timber ...	1,319 2 11	24,976 15 1	26,296 2 0	25,701 7 2	(b) 29 11 0	...	25,731 2 2	564 15 10	
	b. Firewood ...	25 4 0	1,802 8 9	1,8 7 12 9	1,780 15 9	...	...	1,780 15 9	46 13 0	
	c. Bamboos ...	262 5 0	2,400 2 11	2,662 7 11	2,649 11 3	...	...	2,649 11 3	12 12 8	
	d. Grazing and fodder grass ...	15 8 0	2,466 14 0	2,482 6 0	2,331 8 0	...	...	2,331 8 0	150 14 0	
	e. Other minor produce	291 9 8	1,641 0 10	1,932 10 6	1,641 4 10	(b) 5 0 0	...	1,646 4 10	286 5 8	
	Cardamoms ...	20,509 3 10	21,384 6 6	41,893 10 4	26,028 10 0	†12715 3 5	...	40,743 13 5	1,149 12 11	
	V. a. Fines & forfeitures.	...	27 8 0	27 8 0	24 0 0	...	...	24 0 0	3 8 0	
	b. Refunds ...	...	126 2 0	126 2 0	122 8 4	...	...	122 8 4	3 9 8	
	c. Other sources ...	12 4 0	955 9 9	967 13 9	945 1 9	...	...	945 1 9	22 12 0	
	Total Rs.....	26,145 13 1	1,80,567 10 3	2,15,713 7 4	1,97,966 6 10	12,779 12 1	1,878 2 3	2,12,624 5 2	3,089 2 2	

(a) Cancelled sales owing to timber not paid for within the prescribed period 10 per cent forfeited to Government.
(b) Written off vide Secretary's letter No. 1034—91-90, dated 8th July 1892.
(†) Do do No. 135—23-87, dated 28th January 1893, No. 16—23-87, dated 15th February 1893 and No. 566—23-87, dated 25th April 1893.

J. PREVOST,
Deputy Conservator of Forests, Coorg.

FORM No. 64. (PRESCRIBED.)

Outstandings and liabilities on account of contractors and disbursers for the forest year 1892—93.

Division.	Department debtor.			Department creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department, (outstandings.)	By department, (liabilities.)	
Coorg ..	85 2 0	72,518 11 7	72,603 13 7	2,784 8 8	70,500 1 0	82,284 9 8	9,703 11 6	22 15 5	
Total Rs ..	85 2 0	72,518 11 7	72,603 13 7	2,784 8 8	70,500 1 0	82,284 9 8	9,703 11 6	22 15 5	

I. C. BOSE,
Assistant Comptroller General, Forests.

FORM No. 65. (PRESCRIBED.)

Financial results of the year 1892—93.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection & improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
Coorg ..	1,34,742	34,226	63,224	8,991	47,840	1,97,966	91,057	

COORG DY. CONSERVATOR'S OFFICE.
MERKARA, 19th *September* 1893.

J. PREVOST,
Deputy Conservator of Forests, Coorg.

[APPENDIX A.]

REPORT

ON THE OPERATIONS OF THE FOREST SURVEY

IN THE PROVINCE OF COORG

For the 12 months of the year ending 30th September 1892.

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During the year under report the Survey of the Forests was almost completed, including the resurvey of the ghat line and the detailed survey of jamma and leased cardamom malles and plantations. The re-settlement of the line in Kiggatnad Taluk needs some slight alteration in the surveyed boundary.

2. *Ghat Forest Reserves.*—The following statement shows the description of ghat forests surveyed in each village as well as the detailed surveys of jamma and leased malles &c., comprised in each. The area in acres set apart as forest is also given.

No.	Village.	Geni or leased malles		Jamma malles.		Coffee saguvali.		Paisari.		Ghat Reserved Forests area in acres.	Remarks.
		No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.		
	PADINALKNAD TALUK.										
43	Palangala	9	2,759·26	11	950·13		...	...		3,709·39	
44	Karada ...	6	1,177·76	12	995·25	..	...	2	2,437·60	4,610·61	
45	Chelavara	5	1,855·16	3	2,842·98	..	.	2	191·84	4,889·98	
32	Yavakapadi	27	3,958·26	39	4,013·83	5	424·76	10	3,163·32	11,560·17	
57	Bettathuri	9	1,105·38	...	...	7	1,402·88	3	310·02	2,818·28	Ghat line to be surveyed.
22	Kolagadalu	3	272·32	...	..	..		1	1,181·84	1,454·16	*Malles remained to be surveyed.
23	Koppati	3	339·56	..	..	12	1,224·33	1	82·88	1,646·77	
7	Tavuru .. .	3	1,211·80	...	...	16	2,760·68	10	1,325·80	5,298·28	This includes the approximate area of Malle Survey shown in last year's report viz., 12,262 acres as the ground had to be again gone over for survey of the leased malles.
40	Dodda Pulikotu	12	3,883·76	...	...	..	...	6	6,578·18	10,461·94	
39	Iengeri... ..	17	3,548·70	5	560·15	5	1,004·59	2	9,258·31	14,371·75	
38	Perur	6	353·69	..	...	...	...	1	1,125·44	1,479·13	
33	Naladi	41	7,261·41	37	4,699·56	4	714·46	9	4,844·38	17,519·81	
5	Karike...	5	2,128·16	...	...	3	1,759·84	4	13299·83	17,184·83	
4	Mundrotu	12	17,933·10	...	...	3	301·83	3	261·55	†18,496·48	
27	Kundachiri	...	...	...	...	...	...	..	...	3,162·24	
	Total.....	158	47788·32	107	14061·90	55	9,593·37	54	44057·99 or 185·41	1,18,663·82 Sq. miles.	†Exclusive of a well cultivation area 11·04 acres.
	KIGGATNAD TALUK.										
49	Rudraguppe	...	...	...	...	...	...	1	1,705	1,705	The areas entered in column 11 of this Taluk are approximate and true areas can only be given after alterations have been made as per re-settlement.
50	Badaga ..	6	1,605·76	...	...	...	...	2	6,700·24	8,306	
53	Kuttandi ...	...	...	..	...	...	...	1	1,969	1,969	
52	Kongana	...	...	...	...	...	...	1	189	189	
12	Badagarakeri	...	...	...	...	...	...	1	1,325	1,325	
14	Parakatageri	4	2,982·56	...	...	...	...	1	5,725·44	8,708	
13	Birunani ...	...	..	...	...	...	...	1	1,793	1,793	
15	Teralu	9	6,248·31	...	...	...	...	1	5,402·69	11,651	
51	Shettigeri	...	...	...	...	...	...	1	2,657	2,657	
36	Nemmale	...	...	...	...	...	...	1	2,047	2,047	
38	Biruga	...	...	...	...	...	...	1	4,528	4,528	
39	Kurchy	...	...	...	...	...	...	1	3,150	3,150	
42	Dodda Manchalli ...	...	...	...	...	...	...	1	2,016	2,016	
41	Kutta	...	...	...	...	...	...	1	2,814	2,814	
	Total ...	19	10836·63	...	...	...	...	15	42021·37	52,858 or 82·50 Sq. miles.	
	YEDENALKNAD TALUK.										
36	Nangala	...	...	...	...	...	...	2	150·53	150·53	
39	Arji	...	...	...	...	...	...	2	47·50	47·50	
40	Heggala	3	3,078·84	...	...	...	...	2	10782·92	13,861·76	} Malle Survey incomplete.
10	Kedamullur	13	3,306·40	...	...	...	...	5	2,863·14	6,169·54	
	Total.....	16	6,385·24	...	...	...	...	11	13844·09	20,229·33 or 31·61 Sq. miles.	
	MERKARA TALUK.										
7	Hammiala	3	5,532·24	...	...	...	...	1	1,220·97	6,753·21	
11	Hatchinadu	1	228·64	...	...	...	...	1	1,014·72	1,243·36	
	Total.....	4	5,760·88	...	...	...	...	2	2,235·69	7,996·57 or 12·49 Sq. miles.	
	NANJARAJAPATNA TALUK.										
36	Kumarahalli	1	9,155·36	...	...	...	...	..	.	9,155·36 or 14·31 sq. miles.	

3. *Correction of Ghat line and detailed Survey of Malles of Forests already Surveyed.*—The ghat line in Galibidu and Kumbaragadige Villages was surveyed last year. Correction of the line as per decision of the Forest Settlement Officer in the former and detailed survey of malles in both have been done this year. The survey of the ghat line in Kalur and Baribilachalu was previously done by Mr. Morrel. The detailed survey of malles had to be done this year. The following table shows the description of these areas in detail.

No.	Village.	Geni or leased malles		Jamma malles.		Coffee saguvali.		Paisari.		Ghat Reserved Forests area in acres.	Remarks.
		No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.		
					MERKARA TALUK.						
6	Galibidu	5	4,342·44	..	...	1	9·60	2	1,344·48	†5,696·52	† Exclusive of 3 plots of cultivation inside the ghat line area 565·56 acres.
9	Baribilachalu	2	304·54	..	..	..	..	2	68·36	372·90	
8	Kaluru...	5	6,579·68	...	..	*7	157·60	5	2,355·04	9,092·32	
	Total.....	12	11226·66	...	...	8	167·20	9	3,767·88	15,161·74 or 23·69 Sqr. miles.	
					NANJARAJPATNA TALUK.						
55	Kumbaragadige	1	4,568·81	...	...	...	...	1	1,594·68	6,163·49 or 9·63 Sqr. miles.	*Wet cultivation and bane of ryots.

4. *Plantations.*—The following plantations, &c., have been surveyed separately and in course of the cadastol survey.

Name of Plantations.	Reserve in which situated.	Area in acres.	Remarks.
Nalkeri Sandalwood Plantations No. 1 ...	Nalkeri ...	16·16	
Do Teak No. 2 ...	Do ...	23·36	
Hutgat Teak and Sandalwood Plantation No. 1.	Hutgat ...	212·80	
Do Teak No. 3 ...	Do ...	5·76	
Portion of Arikeri forest allowed to ryots for grazing purposes	Arikeri ...	312·96	
Total.....		571.04 or 0·89 sq. miles.	

5. *Total area Surveyed and Computed.*—The total area of Forest surveyed and computed during the year is

Name of Forest.	Surveyed.		Computed.	
	Area in acres.	Area in square miles.	Area in acres.	Area in square miles.
Ghat Forest reserves and malles of Padinalknad Taluk.	1,18,663·82	185·41	1,18,663·82	185·41
Do of Kiggetnad ...	52,858·00	82·59	10,836·63	16·93
Ghat Forest reserve and malles of Yedenalknad ...	20,229·33	31·61	20,229·33	31·61
Do of Merkara ...	7,996·57	12·49	7,996·57	12·49
Do of Nunjarajpatna ...	9,155·36	14·31	9,155·36	14·31
Correction of ghat line and detailed survey of malles of Merkara Taluk	15,161·74	23·69	15,161·74	23·69
Do of Nunjarajpatna	6,163·49	9·63	6,163·49	9·63
Plantations, &c.	571·04	0·89	571·04	0·89
Total.....	2,30 799·35	360·62	1,88,777·98	294·96
Deduct area returned in previous year, in which details were done this year	24,717·89	38·61	...	...
Balance	2,06,081·46	322·01	...	...

The above areas have been computed during the recess, and the area of each description of forest has been entered in the land registers which will be handed over to the Forest Department along with the maps.

6. *Work remaining to be done.*—The table below shows the work remaining to be done. Owing to the early setting in of the rains, the completion of the whole work was impracticable :—

No.	Village.	Nature of work to be done.	Remarks.
		Padinalknad Taluk.	
57	Bettathuru	Ghat Forest line to be surveyed...	Malles completed.
27	Kundacheri	Malles do ...	Ghat line completed.
56	Dabbadaka	Ghat Forest line do ...	
55	Sampagi	Do do ...	
53	Chembu	Both the ghat line and malles ...	
54	Peraji	Do do ...	
		Yedenalknad Taluk.	
40	Heggala	Malle survey incomplete ...	
10	Kedamullur	Do do ...	
		Merkara Taluk	
5	Monnangeri	Malles to be surveyed ...	Ghat line completed.
17	Kotageri	Ghat Forest line do ..	
16	Made	Do do .	

7. *Miscellaneous Work.*—The following statement shows the nature and amount of miscellaneous work done in connection with the Forests :—

Item.	Particulars or nature of work..	Amount of work done.	
1	Supply of forest maps to the Deputy Conservator of Forests	No. of Copies. 42 (6 copies of each of 7 maps.)	
2	Do to the Commissioner of Coorg ...	7 (One of each of 7 maps.)	
3	Insertion of Teak and Sandalwood Plantations and the land allowed to ryots for grazing purposes in their respective forest maps for the use of the Deputy Conservator of Coorg, Forests	No. of Plantations. 5	Area in Acres. 571·04
4	Preparing fair copies of ghat forest and malle survey maps	No. of copies. 30	
5	Inserting details and contours in the fair maps from 2 inch topo maps by enlargement ...	14	
6	Plotting the divisional line of disforested blocks in the map of Devamarchi forest for the use of Deputy Conservator		4,055·40
7	Preparation of tracing of disforested blocks on 16" scale with area of each block for the Deputy Conservator		4,055·40
8	Preparation of tracing of Coorg with roads and names of villages in and near the Forest Reserves on 2 miles=1 inch scale for the use of the Deputy Conservator	Square miles. 1,581·66	

8. The out-turn for the year as shown in the preceding statements is 360·62 square miles, of which 171·54 squire miles represent detailed surveys of cardamom malles. The difficult nature of the cardamom malle survey has been briefly dwelt upon in my reports for the official years 1890—91 and 1991—92, and it is not necessary to repeat my remarks contained in them. Prominent points on the boundaries of 'malles' being fixed by intersections by the plane table, intermediate parts of the boundaries were traversed with the same instrument. This process answered well, the 'malles' being situated in extremely hilly country in the valleys or on the sides of the hills, the tops of which were generally bare.

The whole of the Forest survey has now been carried out with the exception of the few details contained in the statement in paragraph 6 of this

report; added to which the surveyed boundary in Kiggetnad Taluk has to be in some degree altered according to the settlement officer's decisions which were made subsequent to the survey.

Plans of the ghat forests showing the boundaries of 'malles', &c., have been fair copied in the recess by the Forest Establishment and are as computed. Hill contours have been transferred to the new plans from the 2nd topographical maps in the case of 14 maps, whilst others are under process of transfer. When completed these have to be despatched to the Madras Survey for Photo-zincography.

9. The cost of all operations during

the year amounted to Rs.	9,005	1	2	
In the previous year it was „	6,731	13	1	including the cost of instrument.
(ending 30th September 1891.)				
Total Rs...	15,736	14	3	

The whole area brought under survey in the two years being 398 square miles, the average rate per square mile is Rs. 39—8—8 including the cost of instruments.

(Sd.) J. P. BARKER,
Deputy Superintendent, Coorg Revenue Survey.

APPENDIX B

Statement showing the cost of plantations from commencement to end of 30th June 1893

Year opened.	No.	Name of Plantations	Cost up to 31st March 1892	Receipts up to 31st March 1892	During the year 1892—93 Cost	During the year 1892—93 Receipts	Total area.	Total charges.	Total receipts.	Balance against plantations
		REGULAR PLANTATIONS.								
		Sandal.								
1872—73	1	Mensabotta (Gangwara)	14,338	188	1,512	119	213	15,850	302	15,731
1880—81	2	Kargodu (Malambi)	2,366		384	85	66	2,750	85	2,665
1882—83	3	Banawara (Nidta)	1,004		36	8	16	1,040	8	1,032
1878—79	4	Horekeri	7,260	27	290	33	125	7,579	60	7,546
1880—81	5	Hurlikal (Anekadu)	2,006	41	674		71	2,680	41	2,680
1882—83	6	Attur Bakka	1,620	16				1,620	16	1,620
1883—84	7	Yarekolli (Anekadu)	27				2	27		27
1881—82	8	Fraserpet (Gandadagundi)	1,821	60	29		29	1,850	60	1,850
1878—79	9	Do Holagori	950	51	237		5	1,226	51	1,226
1880—81	10	Dubari (Bungalow)	1,006				2	1,006		1,006
1880—81	11	Maldare (South Dubare)	2,446				7	2,446		2,446
1884—85	12	Bambookad (Tittimatti)	2,010				25	2,010		2,010
1880—81	13	Balumani (Mawukal)	2,120				22	2,120		2,120
1880—81	14	Karmad (Hutgat)	2,381				15	2,381		2,381
1880—81	15	Nagarahole (Nalkeri)	2,443				12	2,443		2,443
		Total Sandal	43,827	378	3,201	245	610	47,028	623	46,783
		Teak.								
1872—73	1	Karepura	1,981				14	1,981		1,981
	2	Herikeri	118	19			11	118	19	118
1883—84	3	Hurlikal (Attur)	1,548				19	1,548		1,548
1879—80	4	Anekadu Do in the open	4,330				66	4,330		4,330
1879—80	5	Hanakodu (Dubare) including Chillikeri	2,270				28	2,270		2,270
1881—82	6	Maldare	1,126		3		18	1,129		1,129
1867—68	7	Tittimatti	1,387				24	1,387		1,387
1867—68	8	Karmad	24,801		46		197	24,847		24,847
1872—73	9	Ammale (Nalkeri)	2,357		34		17	2,391		2,391
1868—69	10	Kutompolle	49,163	1,690	2,353		642	51,516	1,690	51,516
		Total Teak	89,081	1,709	2,436		1,036	91,517	1,709	91,517
		Fire Wood.								
1879—80	1	Merkara	12,519	776	1,223		180	13,742	776	13,742
		Total	12,519	776	1,223		180	13,742	776	13,742
		Cultural Operations.								
		Nalkeri strip teak sowing					10			
1887—88	1	Dubare teak sowing	1,139		52		50	1,191		1,191
1887—88	2	Maldare ,,	169					169		169
1888—89	3	Mawukal ,,	176		189		57	365		365
1890—91	4	Nidta sandal ,,	82				25	82		82
	5	Bageri	71				30	71		71
	6	Bikki hare	95		184		99	279		279
		Total	1,732		425		271	2,157		2,157
		Grand Total	1,47,159	2,863	7,285	245	2,097	1,54,444	3,108	1,54,199
		ABSTRACT.								
		Sandal	43,827	378	3,201	245	610	47,028	623	46,783
		Teak	89,081	1,709	2,436		1,036	91,517	1,709	91,517
		Firewood	12,519	776	1,223		180	13,742	776	13,742
		Cultural operations	1,732		425		271	2,157		2,157
		Total	1,47,159	2,863	7,285	245	2,097	1,54,444	3,108	1,54,199

APPENDIX C.

FOREST DEPARTMENT, COORG.

Statement showing cases in which subordinates were punished during 1892—93.

How disposed of—	Permanent establishment.				Temporary establishment.				Grand Total.	Remarks.
	Rangers.	Foresters.	Guards.	Clerks.	Rangers.	Foresters.	Guards.	Clerks.		
Prosecuted	...	...	...	...	...	...	...	...	...	
Dismissed from service... ...	...	3	6	...	...	...	...	...	9	
Degraded	2	...	...	...	...	...	...	...	2	
Suspended	...	...	1	1	...	...	...	...	2	
Fined	1	14	24	1	...	...	...	...	40	
Resigned	...	1	10	...	...	...	...	...	11	
Deserted	...	...	17	...	...	...	...	...	17	
Total.....	3	18	58	2	...	...	...	...	81	

J. PREVOST,
Deputy Conservator of Forests, Coorg.

Residency Press, Bangalore.—13-12-93.—180.